CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SAN FRANCISCO BAY REGION

ORDER NO. 86-35

NPDES PERMIT NO. CA0038393

REISSUING WASTE DISCHARGE REQUIREMENTS FOR:

SEAFIRTH ESTATES COMPANY AND PROPERTY OWNERS WITHIN THE SEAFIRTH ESTATES SUBDIVISION TIBURON MARIN COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (the Board), finds that:

- The Seafirth Estates Company applied for waste discharge requirements and a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES) by application dated April 22, 1986. The Seafirth Estates Company, a non-profit corporation, owns and operates a wastewater collection and treatment system serving the 29 single-family homes in the Seafirth Estates subdivision. The company is governed and financed by the homeowners. The company and the homeowners are referred to hereafter as the discharger. A current list of the property owners and their addresses is included in Attachment A.
- 2. Sanitary sewers collect sewage from the 29 homes in the subdivision and transport it to the treatment plant, located at the end of Seafirth Road. The plant provides secondary treatment using a trickling filter system. Current flows are approximately 7,000 gallons per day. Treated wastewater is discharged to San Francisco Bay via a 100-foot outfall, at 37° 54' 08" Latitude and 122° 28' 08" Longitude.
- 3. The Seafirth plant provides rudimentary disinfection of treated wastewater and does not dechlorinate wastewater, as required by its NPDES permit. As such, the plant is in violation of its current NPDES permit, specifically the effluent limitations for chlorine residual and toxicity.
- 4. The Seafirth Estates subdivision is located on the Tiburon peninsula off Paradise Road about three miles north of Tiburon's town center (see Attachment B). The subdivision is in the Tiburon town limits but outside the boundaries of nearby sanitary districts.
- 5. Another small wastewater treatment plant, run by Sanitary District No. 5 of Marin County, is located about 1/2 mile southeast of the subdivision and serves a small number of residences at Paradise Cove. Most other homes in the vicinity have individual septic systems. There have been

proposals to sewer the entire eastern Tiburon peninsula at the time when several large undeveloped parcels are developed. The area would be included in Sanitary District No. 5, and the District's Paradise Cove plant would be expanded at that time. Under this scenario, the Seafirth subdivision would be connected to the consolidated sewerage system, and the Seafirth plant would close.

- 6. The discharger has indicated an interest in connecting Seafirth Estates to the consolidated sewerage proposal. However, a Seafirth connection is unlikely in the next two years, and a future connection depends on several other factors. These include: (1) development of two or three of the large undeveloped parcels in the vicinity, across whose land the Seafirth force main would have to go, (2) annexation of the area to Sanitary District No. 5 of Marin County, and (3) participation by a majority of existing homes now on septic systems. The Board cannot reasonably set a schedule for connecting Seafirth Estates to a consolidated sewerage system, since the connection depends on factors beyond the discharger's control.
- 7. The discharger is presently governed by waste discharge requirements in Order No. 81-36, which allow discharge into San Francisco Bay.
- 8. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for San Francisco Bay.
- 9. The beneficial uses of San Francisco Bay in the vicinity of the outfall are:
 - a. Water contact recreation
 - b. Non contact water recreation
 - c. Commercial and sport fishing
 - d. Wildlife habitat
 - e. Preservation of habitat for rare and endangered species
 - f. Estuarine habitat
 - g. Fish migration and spawning
 - h. Shellfish harvesting
 - i. Navigation
 - j. Industrial process and service supply
- 10. The Basin Plan prohibits the discharge of any wastewater which has particular characteristics of concern to beneficial uses at any point where wastewater does not receive an initial dilution of at least 10:1.
- 11. The California Administrative Code (Title 23, Chapter 3, Subchapter 14) requires at least a Grade II operator to supervise a municipal biofilter plant with a design flow of up to 1.0 million gallons per day. The discharger presently contracts with a Grade IV operator to operate the Seafirth

plant.

- 12. This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
- 13. The discharger and interested persons have been notified of the Board's intent to revise requirements for the existing discharge and have been provided with the opportunity to submit their written comments.
- 14. The Board, in a properly-noticed public hearing, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder and to the provisions of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Prohibitions

- 1. The discharger is prohibited from bypassing or overflowing untreated wastewater to waters of the State, either at the plant or from the collection system.
- 2. The discharger is prohibited from discharging wastewater at any point at which the wastewater does not receive an initial dilution of at least 10:1 (receiving water to wastewater flow).
- 3. The average dry weather flow shall not exceed 7,500 gallons per day. Averages shall be determined over three consecutive dry weather months each year.

B. Effluent Limitations

The discharge of an effluent containing constituents in excess of the following limits is prohibited:

	Constituents	<u>Units</u>	Monthly Average	Weekly Average	Daily <u>Maximum</u>	Instan- taneous <u>Maximum</u>
a.	BOD	mg/l	30	45	60	
b.	Suspended Solids	mg/l	30	45	60	
c.	Oil & Grease	mg/l	10	***	20	

- d. Settleable ml/l-hr 0.1 - 0.2 Solids
- e. Chlorine mg/l - 0.0 Residual
- f. Total Coliform Organisms

The waste as discharged, or at some place in the treatment process, shall meet or exceed the following limits of quality. The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform when verified by a repeat sample taken within 48 hours.

g. Toxicity

The survival of an acceptable test organism in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50 percent survival.

h. pH

The pH of the discharge shall not exceed 9.0 nor be less than 6.0.

2. The arithmetic mean of the biochemical oxygen demand (5 day, 20°C) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85% removal).

C. Receiving Water Limitations

- 1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
 - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will

cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of the these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

- 2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. Dissolved oxygen: 5.0 mg/l minimum. The median of any three consecutive samples shall not be less than 80% saturation. When natural factors cause lesser concentrations than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - b. Dissolved sulfide: 0.1 mg/l maximum.
 - c. pH: Variation from natural ambient pH by more than 0.2 pH units.
 - d. Un-ionized Ammonia as N: 0.025 mg/l annual median and 0.4 mg/l maximum.
- 3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

- 1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 81-36. Order No. 81-36 is hereby rescinded.
- 2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:
 - Mass emission limit in lbs/day = Concentration limit in $mg/l \times 8.34 \times Actual$ flow in mgd averaged over the time interval to which the limit applies.
- 3. The discharger shall comply with all sections of this order immediately except as stipulated in provision 4 below.

4. The discharger shall comply with the effluent limitations for chlorine residual and toxicity (items B.1.e and B.1.g) according to the following schedule:

Task Completion Date

- a. Submit design for improvements January 1, 1987 to provide dechlorination of effluent, subject to Executive Officer's approval
- b. Complete construction of plant May 1, 1987 improvements
- c. Attain full compliance with June 1, 1987 effluent limitations

The discharger shall submit to the Board, on or before each completion date, a report detailing compliance or non-compliance with the specified task. If non-compliance is being reported, the report should state the reasons for non-compliance and provide an estimate of when the discharger will return to compliance. The discharger shall notify the Board in writing when he or she has returned to compliance.

- 5. The discharger shall employ a plant operator with at least a Grade II certification to supervise operation of the sewage treatment plant, or demonstrate to the Executive Officer's satisfaction that an equivalent levelor supervision is being maintained.
- 6. The discharger shall comply with the Self-Monitoring Program as ordered by the Executive Officer.
- 7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.
- 8. This order expires on June 18, 1991. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of this expiration date as application for issuance of new waste discharge requirements.
- This order shall serve as a National Pollutant
 Discharge Elimination System permit pursuant to Section
 402 of the Federal Water Pollution Control At or
 amendments thereto, and shall become effective 10 days
 after the date of its adoption, provided that the
 Regional Administrator of the Environmental Protection
 Agency has no objection. If the Regional Administrator
 objects to its issuance, the permit shall not become
 effective until such objection is withdrawn.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 18, 1986.

ROGER B. JAMES Executive Officer

Attachments:

List of Property Owners and Addresses Location Map Standard Provisions (April 1977)

ATTACHMENT A

SEAFIRTH DIRECTORY

BERGSUND, Dick and Joan	55 Seafirth Road	435-4851, 989-0989	
BRONER, Sol and Barbara	30 Seafirth Road	435-2349	
CARDOZA, Dick and Donna	4000 Paradise Drive	435-0652	
DENTON, Chuck and Jean	40 Seafirth Road	435-4286	
DREYER, Ray and Margarita	80 Seafirth Road	435-0334	
FORD, Catherine	30 Seafirth Place	435~1032	
HARRISON, Will and Peggy	10 Seafirth Road	435-3843	
HELMHOLZ, Eckhart and Edith	90 Seafirth Road	435-9497, 982-6600	
KELLY, Dorothy	36 Seafirth Road	435-4736	
KIMBALL, Ronald and Barbara	4020 Paradise Drive	435-2428	
LeROY, Bill and Paula	75 Seafirth Road	435–9896	
LEVATIN, Paul and Evelyn	65 Seafirth Road	435-3700	
LINES, Kal and Arlys	60 Seafirth Road	435-5103	
McCLELLAND, Ruby	5 Seafirth Place	435-4602	
McLEAN, Jack and Gail	45 Seafirth Road	435-5608, 983-1297	
McLOUGHLIN, Terry and Carol	17 Seafirth Road	435-0841, 777-4488 Terry	
MUIRHEAD, Fraser and Helen	49 Seafirth Place	453-5502 Carol 435-0837 or 0608	
O'NEILL, Janet	20 Seafirth Rpad	435-2915	
FRESTON, Louisa and Jason Kuhn	4030 Paradise Drive	435-1317,391-3 577 , 34 <i>3</i> -4068	
SAGEBIEL, Dick and Daisy	9 Seafirth Place	435-3238	
SCHELLENBERG, Wo.A. and Jane	15 (Seafirth Place	435-1280	
SOLBERG, Bjorn and Joann	70 Seafirth Road	435-9086	
SOUZA, Leo and Maxine	3 Seafirth Lane	435-1348	
STERN, Dorothy	95 Seafirth Road	435-4296	
SWANSON, Robert and Sandy	2 Seafirth Lane	435-9596, 848-1717	
THELANDER, Dr. Jo	40 Seafirth Place	435-1889	
WATSON, Richard and Gerry	20 Seafirth Place	435-1013	
WILLOUGHBY, Doc and Linda	85 Seafirth Road	435-0272	
WORTSMAN, Lester and Joan	50 Seafirth Road	435-1130	

